

## **SPEED LIMIT STUDY FOR THE CITY OF MADISON, AL**

A speed study has been performed for the collector road system for the City of Madison. The study was a joint effort of the Police and Engineering Departments. The purpose of this study was to evaluate the current traffic conditions of Madison's collector road system and update the Speed Limit Ordinance to reflect the current conditions. Several roads were added to the Speed Limit Ordinance coverage because of change in traffic patterns and volumes.

The American Association of State Highway and Transportation Official (AASHTO) Manual on Uniform Traffic Control Devices (MUTCD) states that the posted speed limit should be within 5 mph of the 85<sup>th</sup> percentile speed of free flowing traffic. This speed may be adjusted for a variety of reasons including: the roadway characteristics or current physical condition; the roadway development such as number of driveways or intersections; roadside parking practice and reported crash experience.

AASHTO assumes the majority of drivers, approximately 85 percent, will drive at a speed that they judge to be safe. Speed limits should be set at a level to encourage the use of the collector road as the primary route. Collector roads with speed limits set too low below the 85<sup>th</sup> percentile speed creates traffic enforcement issues and encourages drivers to use alternate routes through streets not intended for through traffic. Reductions of the speed limit below the 85<sup>th</sup> percentile should be based on quantitative and verifiable criteria.

For purposes of this speed limit study, we recommend the following criteria:

1. Begin speed limit at the 85<sup>th</sup> percentile speed
2. Adjust downward for inadequate road width by 5% for level of service C, D, E and F
3. Adjust downward for on-street parking by 5%
4. Adjust downward for driveway and roadway access by following
  - a. <40 rating = 0%
  - b. 40-60 rating = 2.5%
  - c. >60 rating = 5%
5. Final recommended speed limit to be the 5 mph segment nearest the 85<sup>th</sup> percentile speed, less adjustments

For purposes of this speed limit study, the criteria is defined as:

1. 85<sup>th</sup> percentile speed limit is that speed at which 85 percent of drivers are at or below
2. Roadway minimum width requirements are
  - a. <400 vehicles/day = 20 ft.
  - b. 400-2,000 vehicles/day = 22 ft.
  - c. >2,000 vehicles/day = 24 ft.
3. Ratings are for driveway and other access is determined by the summation of all weighted drive access point divided by the road length in miles
  - a. Residential drive weight is 1
  - b. Minor commercial drive weight is 5
  - c. Major commercial or roadway connection weight is 10

The Madison Police Department's Traffic Safety Division performed the speed surveys for the Study. The Madison Engineering Department tabulated the results and made the final speed limit recommendations.

## SPEED LIMIT STUDY FOR THE CITY OF MADISON

STREET NAME	CURRENT SPEED LIMIT	DATE OF SURVEY	SCOPE OF SURVEY	TRAFFIC VOLUME	85% SPEED	LEVEL OF SERVICE	ADEQUATE LANE WIDTH (Y/N)	ON STREET PARKING (Y/N)	DRIVE ACCESS (#)	*PROPOSED SPEED LIMIT
Arlington Dr.	25	7/16/2008	South of West Dublin	804	35.14	A	Y	N	133	35
Balch Rd. (From Brownsferry Rd. to North City Limits)	35	1/29/2008	S of Loch Lomond Dr.	6,415	46.64	B	N	N	97	40
Balch Rd. (From Mill Rd. to Brownsferry Rd.)	New	New	N/A	New	New	B	Y	N	50	40
Huntsville/Brownsferry Rd. (From Burgreen Rd. to Co. Line Rd.)	40	1/29/2008	At Progress Lane	6,076	46.62	B	N	N	71	45
Brownsferry Rd. (Co. Line to Hughes Rd.)	35									40
Brownsferry Rd. (From Co. Line Rd. to Wall Triana Hwy.)	35									40
Burgreen Rd. (South of Wickerberry Lane)	45	5/6/2008	1/2 mile N of Brownsferry Rd.	1,619	53.87	A	N	N	40	45
Celtic Dr.	45	5/6/2008	Celtic Dr.	2,417	48.85	A	Y	N	115	45
Commerce Circle	25	5/6/2008	W of Lanier	143	31.80	A	Y	N	60	30
County Line Rd.	45 & 50	1/23/2008	S. Of RR bridge (northbound)	5,508	54.73	C	Y	N	40	50
Eastview Dr. (West of Hughes and East of Victoria)	35	2/1/2007	Eastview Dr.	3,796	43.33	B	N	N	60	35
Eastview Dr. (Victoria to Hughes Rd.)	25									25
Edgewater Dr.	25	12/27/2007	Edgewater Dr.	2,295	36.56	A	Y	N	40	25
Front St. (From Pension Row to Sullivan St.)	35	4/11/2008	At Allen St.	3,600	40.92	A	N	N	143	40
Gillespie Rd. (Wall Triana to Co. Line)	35	4/11/2007	At Pumphouse Rd.	1,854	44.03	A	N	N		40
Gillespie Rd. (Wall Triana to Hughes Rd.)	35									35
Gooch Lane (Wall Triana to Balch Rd)	35	4/24/2007	Gooch Lane	3,630	42.74	A	N	N	94	35
Hardiman Rd. (From Burgreen Rd. to Co. Line Rd.)	45	5/27/2008	E of Wesley Clark	2,042	48.30	A	N	N	91	45

Yellow highlighted rows indicate roads with recommended change

Amended 3-31-09

## SPEED LIMIT STUDY FOR THE CITY OF MADISON

STREET NAME	CURRENT SPEED LIMIT	DATE OF SURVEY	SCOPE OF SURVEY	TRAFFIC VOLUME	85% SPEED	LEVEL OF SERVICE	ADEQUATE LANE WIDTH (Y/N)	ON STREET PARKING (Y/N)	DRIVE ACCESS (#)	*PROPOSED SPEED LIMIT
Highland Dr.	25	3/1/2008	S of Miller Blvd (not free flowing)	1,038	29.42	A	Y	Y	133	25
Hughes Rd (From Madison Blvd. to Mill Rd.)	45	8/20/2008	Between Hughes Rd and Will Halsey Way	5,869	52.44	D	Y	N	85	45
Hughes Rd. (From Mill Rd. to Eastview	35	9/22/2008	At Hughes Plaza	852	41.61	D	N	N	167	40
Hughes Rd. (Eastview Dr. to US Hwy 72)	40	9/11/2008	N of Plaza on 3-lane	15,678	43.47	D	Y	N	126	45
Intergraph Way	25	7/1/2008	At I-565	1,962	45.14	A	Y	N	55	45
Jetplex Circle	25	6/6/2008	West of Jetplex Lane	399	33.30	A	Y	N	166	35
Jetplex Lane	25	6/6/2008	Between Madison Blvd. and Jetplex Cir.	1,421	37.53	A	Y	N	170	35
Lanier Rd. (From Celtic Dr. to Will Halsey Way)	40	4/28/2008	E of Celtic	1,795	38.33	A	N	N	101	35
Lanier Rd. (From Madison Blvd. to Will Halsey Rd.)	30	4/28/2008	Between Will Halsey Way and Commerce	2,870	46.04	A	Y	N	104	45
Madison Blvd. (From Co. Line Rd. to Westchester)	55	11/5/2008	Between Westchester and County Line	6,838	61.76	D	Y	N	>60	55
Madison Blvd. (From Hughes Rd. to Zierdt Rd.)	55	12/2/2008	At Flagstone Dr.	9,969	59.42	D	Y	N	>60	55
Madison Blvd. (From Westchester to Hughes Rd.)	50	11/20/2008	Near Quarry Rd.	10,281	47.13	E	Y	N	>60	45
Metaire Lane (Eastview to Broken Bow Lane)	25	4/6/2007	Metaire Lane	855	41.64	A	N	N	205	30
Mill Rd. (From Co. Line Rd. to Sullivan St.)	40	5/27/2008	W of Fox Hollow	3,252	44.91	B	Y	N	92	45
Mill Rd. (from Sullivan St. to Hughes Rd)	35	5/27/2008	At Madison Pointe Place	3,717	45.12	B	N	N	98	35
Mose Chapel Rd.	25	4/1/2008	1/4 mile N of Mill	684	40.31	A	N	N		30
Nance Rd.	25	9/11/2008	N of Rainbow School	1,387	37.63					35
Old Madison Pike	35	1/8/2008	At Marion Dr.	15,100	41.95	E	Y	N	136	40
Palmer Rd.	45	4/21/2008	E of Palmer Park	2,933	54.76	A	N		>60	45
Plaza Blvd.	25	4/21/2008	N of Brownsferry Rd.	805	38.01	A	Y	N	55	35
Portal Lane (Hughes to Douglas)	25	1/3/2008	Portal Lane	1,290	37.30	A	Y	Y		30

Yellow highlighted rows indicate roads with recommended change

Amended 3-31-09

## SPEED LIMIT STUDY FOR THE CITY OF MADISON

STREET NAME	CURRENT SPEED LIMIT	DATE OF SURVEY	SCOPE OF SURVEY	TRAFFIC VOLUME	85% SPEED	LEVEL OF SERVICE	ADEQUATE LANE WIDTH (Y/N)	ON STREET PARKING (Y/N)	DRIVE ACCESS (#)	*PROPOSED SPEED LIMIT
Portal Lane (Douglas to Shelton)	25	1/3/2008	Portal Lane	1,290	37.30	A	Y	Y		25
Production Ave.	25	9/22/2008	Between Jetplex and Co Line	1,118	41.08					35
Royal Dr.	25	3/24/2008	E of Deer Trail	2,127	35.33	A	Y	N	81	35
Shelton Rd. (from Madison Blvd. to Portal Lane)	30	12/11/2007	At Springfield	3,909	41.44	A	N	N	116	30
Shelton Rd. (North of Old Madison Pike)	25									25
Shelton Rd. (From Portal Lane to Old Madison Pike)	30	12/11/2007	At Summerview	5,217	42.83	A	Y	N	142	40
Slaughter Rd.	45	7/9/2008	Between Mingo Rd. and Kannon	9,600	51.91	B	N	N	N/A	45
Sullivan St. (From Kyser Blvd to Mill Rd.)	35	7/26/2008	At Perry St.	16,804	45.04	F	Y	N	254	35
Sullivan St. (From Madison Blvd. to Kyser Blvd)	40					F	Y	N		40
Sullivan St. (From Mill Rd. to Brownsferry Rd.)	40	9/2/2008	Between Mill Rd and Brownsferry Rd.	11,478	47.40	D	N	N	110	40
Wall Triana Hwy. (From Brownsferry Rd. to northern City Limits)	40	8/7/2008	At Mill Creek Crossing	10,548	42.00	D	N	N	109	40
Wall Triana Hwy. (From southern City Limits to Madison Blvd.)	40					F	Y	N	20	45
West Dublin Dr.	25	6/24/2008	At Essex Court	1,808	33.80	A	Y	N	115	35
Westchester Dr.	25	3/24/2008	N of West Dublin Rd.	566	33.00	A	Y	N	93	35
Will Halsey Way	25	7/17/2008	West of Hughes Rd.	3,520	34.75	B	N	N	101	35
Zeirdt Rd.	45					D	Y	N		45

Yellow highlighted rows indicate roads with recommended change

Amended 3-31-09

